Graphing Ellipses WS Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_\_\_

***Do all work on a different piece of paper for credit.***

Graph the Ellipses on graph paper, labeling all of the important information: center, foci, vertices, and co-vertices.

1. 2.

3. 4.

State what type of conic is given from general form and then convert it to standard form. Then identify for Parabolas: vertex, focus, directrix and LR points

Circle: center and radius

Ellipse: center, foci, vertices, and co-vertices

Hyperbola: center, foci, vertices and asymptotes

5. 4x2+ 9y2-16x+18y-11=0 6. 2y2-4y-x+2=0

7. 9x2 - 4y2-18x +8y -31=0 8. 3x2+ 3y2-12x+27y-12=0

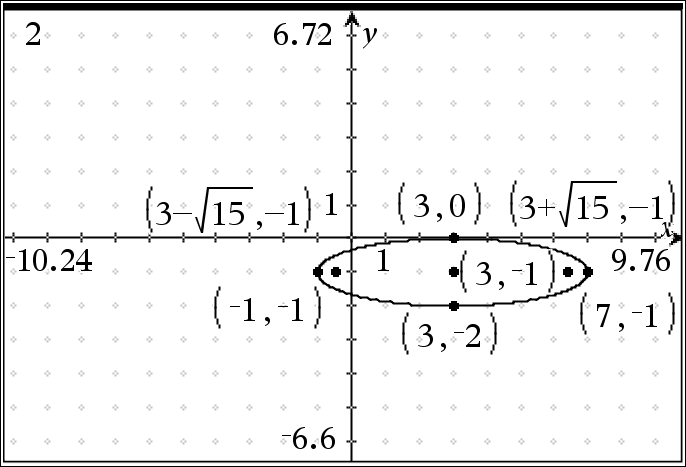
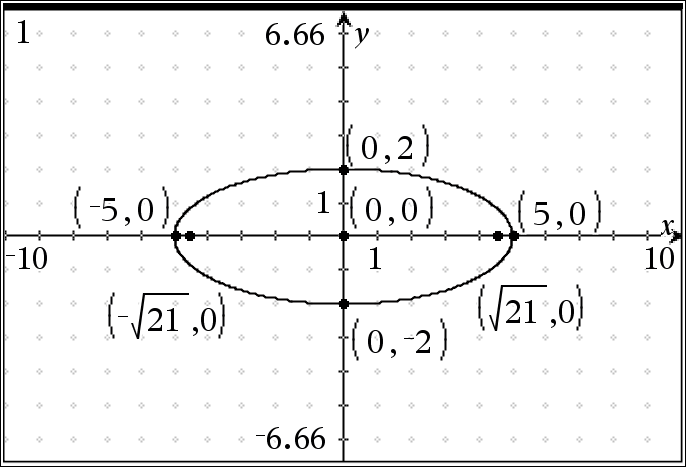
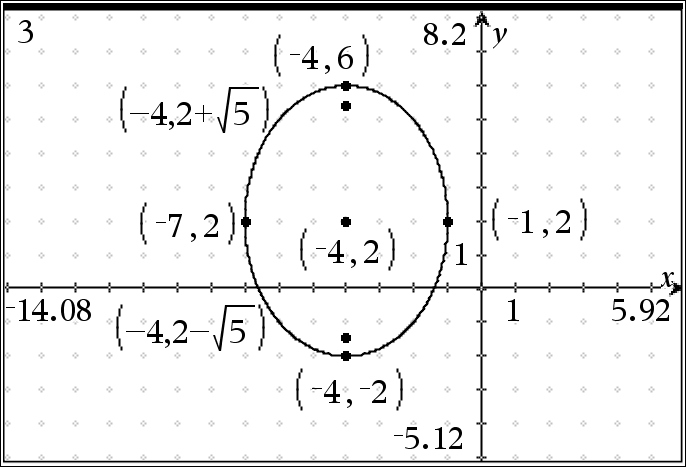
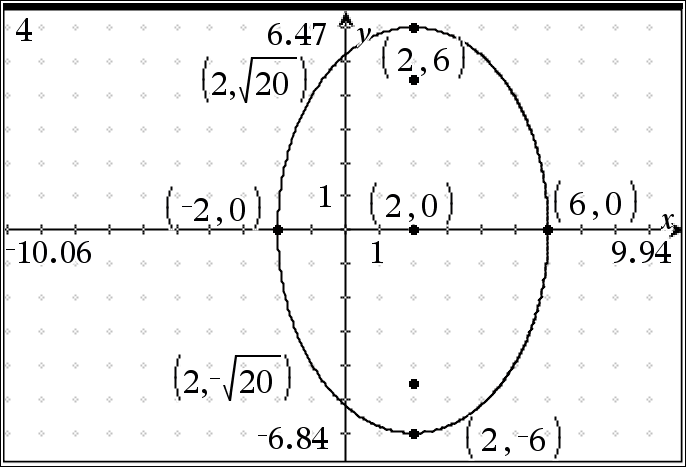
Find the standard form of each conic with the given information.

9. Ellipse: foci at (-4,2) and (-4,8), vertex (-4,10).

10. Circle: endpoints of the diameter are (-3,4) and (5, 10).

11. Hyperbola: center at (-2,-3), focus at (-4,-3) and vertex at (-3,-3).

12. Parabola: focus at (-2,0) and directrix at x=2.



5. ellipse, , (2,-1), (2±, -1, (5,-1) and (-1, -1), (2,) and (2, -)

6. parabola, (y-1)2=x, (0,1), (1/8,1), x=-1/8, (1/8,5/4) and (1/8, 3/4)

7. hyperbola, , (1,1), (1±, (3,1) and (-1, 1), y=±

. circle, (x-2)2+(y+9/2)2=145/4, (2,-9/2),

9. 10. (x-1)2+(y-7)2=5 11. 12. y2=-8x